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EXAMINER

WANG, JACK K

ART UNIT	PAPER NUMBER
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2612

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,547	Applicant(s) SCHIMMER ET AL.	
	Examiner JACK WANG	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18 and 20-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 20-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1-17, and 19 Cancelled.
2. Claims 18, 20-33 Pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18, 20-26, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US Patent # 6,552,661 B1), and further in view of Horwitz et al. (US Patent # 6,617,962 B1).

Consider claim 18, Lastinger et al. clearly shown and discloses a localization (zone-based) system, comprising: means for generating an energy (radio frequency) field, wherein the energy (radio frequency) field is formed by one or more pulse streams (pulse code modulation), at least one disrupting means for locally disrupting the energy field, detection means for detecting the local disruption of the energy field, and a control unit (locator) coupled to the detection means for localizing the disrupting means on the basis of the detected local disruption, wherein the means for generating the energy field are adapted to transmit pulse beams of a plurality of pulse streams (Column 4 lines 4-27), except wherein each pulse beam comprises nine pulse streams, which pulse streams are oriented at least substantially parallel to each other.

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Horwitz et al. teaches a system for multi-standard RFID tags discloses the wherein at least two pulse streams of a pulse beam are oriented at least substantially parallel to each other (Column 6 lines 52-61) for the benefit of provide a multi frequency capability for the reader. Although Horwitz et al. does not specifically teach each pulse beam comprises nine pulse streams. He does disclose the plurality radio frequency modules, which are arranged in parallel to provide a multi-frequency capability for the reader. Since the combination of familiar element according to known methods is likely to be obvious when it does no more then yield predictable results.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include each pulse beam comprises nine pulse streams, which pulse streams are oriented at least substantially parallel to each other as shown in Horwitz et al. in Lastinger et al. device for the benefit of provide a multi frequency capability for the reader.

Consider claim 20, Lastinger et al. clearly shown and discloses the system wherein the disrupting means is arranged on at least one object (Column 3 lines 63-66).

Consider claim 21, Lastinger et al. clearly shown and discloses the system wherein the disrupting means is arranged on an animal (Column 3 lines 63-66).

Consider claim 22, Lastinger et al. clearly shown and discloses the system wherein the disrupting means is arranged on a person (Column 3 lines 63-66).

Consider claim 23, Lastinger et al. clearly shown and disclose the system wherein the disrupting (determination) means is adapted to disrupt (detect) the energy field in a manner that distinguishes it from other disrupting means in the system (Column 4 lines 4-19).

Consider claim 24, Lastinger et al. clearly shown and discloses the system wherein the disrupting means is adapted to reflect the pulse streams (Column 4 lines 29-36).

Consider claim 25, Lastinger et al. clearly shown and disclose the system wherein the disrupting means is adapted to influence (absorption) the pulse streams (Column 4 lines 29-36).

Consider claim 26, Lasting et al. clearly shown and discloses the similar invention except the system wherein the disrupting means is formed by a chip.

Horwitz et al. teaches the disrupting means is formed by a chip (Column 1 lines 34-38) for the benefit of comply with industrial standard in RFID technology.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the disrupting means is formed by a chip as shown in Horwitz et al., in Lastinger et al. device for the benefit of comply with industrial standard in RFID technology.

Consider claim 28, Lastinger et al. clearly shown and discloses the system wherein the localization system is provided with visual means (computer 110) communicating with the control unit for displaying the location of the detected disrupting means (Column 4 lines 41-51).

Consider claim 29, Lastinger et al. clearly shown and discloses the system wherein the communication between the control unit and the visual means takes place wirelessly via electromagnetic radiation (Column 4 lines 63-67 and Column 5 lines 1-11).

Consider claim 30, Lastinger et al. clearly shown and disclose the system wherein the communication between the control unit and the visual means takes place wirelessly via pulse streams (Column 4 lines 63-67 and Column 5 lines 1-14).

Consider claim 31, Lastinger et al. clearly shown and discloses a method for localizing objects or animals, comprising the steps of: A) generating an energy (radio frequency) field, wherein the energy field is formed by one or more pulse streams, B) placing in the energy field at least one object or animal provided with at least one disrupting means for locally disrupting the energy field, C) detecting the local disruption (detection) of the energy (radio frequency) field, and D) localizing the object or animal on the basis of the detected local disruption (Column 4 lines 4-29), except wherein each pulse beam comprises nine pulse streams oriented at least substantially parallel to each other.

Horwitz et al. teaches a system for multi-standard RFID tags discloses the wherein at least two pulse streams of a pulse beam are oriented at least substantially parallel to each other (Column 6 lines 52-61) for the benefit of provide a multi frequency capability for the reader. Although Horwitz et al. does not specifically teach each pulse beam comprises nine pulse streams. He does disclose the plurality radio frequency modules, which are arranged in parallel to provide a multi-frequency capability for the reader. Since the combination of familiar element according to known methods is likely to be obvious when it does no more then yield predictable results.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include each pulse beam comprises nine pulse streams oriented at least substantially parallel to each other as shown in Horwitz et al. in Lastinger et al device for the benefit of provide a multi frequency capability for the reader.

Consider claim 32, Lasting et al. clearly shown and discloses the method, wherein the method is provided with a step E) comprising of visualizing the location of the object or animal

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after localizing the object or animal on the basis of the detected local disruption as according to step D) (Column 4 lines 22-27 and Column 5 lines 6-8).

Consider claim 33, Lastinger et al. clearly shown and discloses the method wherein while step B) is being performed a person provided with at least one disrupting means is placed in the energy (RFID) field to locally disrupt the energy (RFID) field (Column 3 lines 61-66).

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lastinger et al. (US Patent # 6,552,661 B1) in view of Horwitz et al. (US Patent # 6,617,962 B1) as applied to claim 18 above, and further in view of Orenstein et al. (US Patent # 5,976,038) (Already of record).

Consider claim 27, Lastinger et al. and Horwitz et al. combined referencea teaches similar invention except the system wherein the disrupting means is formed by a coating.

Orenstein et al. teaches the disrupting means is formed by a coating (Column 4 lines 5-17) for the benefit of reflecting the energy towards the receiving antenna.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the disrupting means is formed by a coating as shown in Orenstein et al., in Lastinger et al. and Horwitz et al. combined device for the benefit of reflecting the energy towards the receiving antenna.

Response to Arguments

6. Applicant's arguments, see remarks, filed 5/28/2008, with respect to U.S.C. § 112, second paragraph have been fully considered and are persuasive. The rejection of claim 23 has been withdrawn.

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7. Applicant's arguments filed 5/28/2008 have been fully considered but they are not persuasive.

8. With respect to 18, 20-26 and 28-33. Applicant argues that Lastinger is directed to a zone-based identification system that uses radio frequencies to determine whether a specific object is located within a certain zone. The system includes a receiver and a plurality of identification devices which are attached to different objects within the system. As admitted in the Office Action, Lastinger does not teach or suggest using pulse beams having multiple pulse streams oriented substantially parallel to one another.

Horwitz is directed to a reader for a radio-frequency identification (RFID) system that is capable of simultaneously reading multiple tags operating at different frequencies. The reader includes a different module for each of the available frequencies. Each of the modules receives a return signal from a corresponding RFID tag and converts the signal into a pulse signal which can be interpreted and analyzed by the reader. Horwitz is cited in the Office Action as teaching at least two pulse streams which are oriented parallel to one another for the purpose of providing the reader with multi-frequency Capacity. However, as stated in the Office Action, Horwitz, whether alone or in combination with Lastinger, fails to teach or suggest the use of pulse beams comprising nine pulse streams which are oriented substantially parallel to one another. The examiner respectfully disagrees. The Lastinger teaches the system which for tracking persons, animals, and object (Column 1 lines 13-18). It is in the same field of endeavor as claimed invention, which relates to a method for localizing objects or animals using such a localization system. As admitted in the prior Office Action, Lastinger does not teach the using multiple pulse beams nor each pulse beams comprises nine pulse streams. However, Horwitz teaches the

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multiple frequency module for interrogating the respective types of tags and for receiving the information transmitted by the tags to the respective radio frequency modules by arrange the radio frequency module in parallel (Column 6 lines 52-61). Although Horwitz et al. does not specifically teach each pulse beam comprises nine pulse streams. He does disclose the plurality radio frequency modules, which are arranged in parallel to provide a multi-frequency capability for the reader. Since the combination of familiar element according to known methods is likely to be obvious when it does no more then yield predictable results.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The Lastinger and Horwitz combined references teaches the limitation presented by applicant regarding the use of pulse beams comprising nine pulse streams which are oriented substantially parallel to one another.

9. With respect to claim 27, applicant argues that the Orenstein is directed to an apparatus for detecting whether an object, and specifically a playing ball, has crossed a determinative line. The apparatus includes an antenna with a first and second antenna pattern and a ball outfitted with a transmitter which emits a signal that is received by the antenna. The transmitter can be disposed in the ball or be composed of a reflective coating which illuminates the ball with energy

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which is then reflected toward the antenna. The Office Action relies on Orenstein solely for the disclosure of this reflective coating.

Contrary to the teachings of the cited art, claim 18 is directed to a localization system comprising a means for generating an energy field which is adapted to transmit pulse beams comprising nine pulse streams which are oriented substantially parallel to one another. The examiner respectfully disagrees. As Orenstein indicated in the reference by coating the ball (object) with reflective coating, including a resonant coating, and illuminating the ball with energy to be reflected toward the receiving antenna (disrupting means) (Column 4 lines 5-17). Since the antenna received the energy reflected from the coating on the ball (object), it is detecting the local disruption of the energy field as presented in claim 18 in the claimed invention.

Furthermore, applicant argues that the unique features of Applicants invention, and particularly the limitation that the pulse beams are split into nine pulse streams which are oriented at least substantially parallel to one another, is not taught or suggested in the cited art. Particularly, the combination of Lastinger and Horwitz fails to teach this arrangement for the reasons discussed herein, which are consistent with the statements regarding the deficiencies of these references set forth in the Office Action. Hartmann, while discussing a system with nine pulses, teaches that these pulses are oriented consecutively with respect to one another, which is distinguishable from Applicants' invention where the multiple pulse streams are disposed at least substantially parallel to one another. In fact, Hartmann teaches away from such a parallel orientation. Orenstein also fails to cure this deficiency with Lastinger, Horwitz and Hartmann.

Consequently, the teachings of the cited references, whether taken alone or in combination, are insufficient to render obvious Applicants' claims, as now presented. Applicants thus submit that the claims are patentable over these references.

The examiner respectfully disagrees. Although Horwitz et al. does not specifically teach each pulse beam comprises nine pulse streams. He does disclose the plurality radio frequency modules, which are arranged in parallel to provide a multi-frequency capability for the reader. Since the combination of familiar element according to known methods is likely to be obvious when it does no more than yield predictable results.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The Lastinger, Horwitz, and Orenstein combined references teaches the limitation presented by applicant regarding the use of pulse beams comprising nine pulse streams which are oriented substantially parallel to one another and the coating applied to the object for disrupting means and detecting of energy field.

Terminal Disclaimer

10. The terminal disclaimer filed on 5/28/2008, with respect to Double Patenting rejection has been fully considered and are acceptable. The double patenting rejection of claims has been withdrawn.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACK WANG whose telephone number is (571)272-1938. The examiner can normally be reached on M-F 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JKW/

/Jeff Hofsass/

Supervisory Patent Examiner, Art Unit 2612